

# Allen County HamNews

Fort Wayne Radio Club

Fort Wayne DX Association

Allen County Amateur Radio Technical Society

January 2022

Volume 23

Issue 1

## In this edition:

### From the Editor

Page 2

### Skywarn Update

Page 3

### Carole's Corner

Page 4

### ACARTS President's Message

Page 5

### Auroral-E Opening

Page 7

### Radio in Popular Literature

Page 8

### Crystal Radio Contest

Page 10

### January = SKCC K3Y

Page 11

### Contests & Operating Events

Page 12

### For Sale

Page 13

### And more!



## Ramblings from the Editor

### Congratulations to K9LA

A little mouse mentioned that Carl, K9LA was the winner of the Cover Plaque award for the December 2021 edition of QST. You can read more about this at:  
<http://www.arrl.org/news/carl-luetzelschwab-k9la-wins-the-december-2021-qst-cover-plaque-award>

### New Officers

Several local hams became new officers of the Fort Wayne Radio Club and the Allen County Amateur Radio Technical Society as of 1/1/22. Thank you for your willingness to serve.

### K3Y Special Event Station

January marks the annual K3Y special event station for the SKCC organization. Read more about it in N8KR's column this month. Your editor will be braving the pileups on the first evening of this operation, so please wish me well.

Try to work a grand sweep!

### Contest & Special Events Calender

This month I am trying out a new format for the selected contest calendar. Please see page 12 for more information.

### Wrapping Up

If any standard information (club officers, repeaters, nets, and so forth) in the HamNews needs to be updated throughout the year, please do not hesitate to let me know.

As we start another new year, I would like to wish you and your family the best for 2022. Catch you out there on the airwaves!

73,

*Josh, W9HT*



**WELCOME  
TO 2022!**

# Allen County HamNews

**HamNews is a monthly publication of the Fort Wayne Radio Club, the Allen County Amateur Radio Technical Society, and the Fort Wayne DX Association.**

**Articles are written by members and friends of the three clubs. New submissions for HamNews are always welcome. Please send your information to the editor within two days of the end of the month for inclusion in the next edition.**

HamNews Editor  
Josh Long, W9HT  
drjoshlong (at) gmail.com



## Unusual December weather prompts Skywarn net activation

By Jay Farlow, net manager, Allen County Skywarn

On Friday, Dec. 10, a strong area of low pressure brought some severe thunderstorms to Indiana late in the evening and into the early morning hours of December 11. The same system created an outbreak of tornadoes in several states, including Illinois and Kentucky.

At 12:20 a.m. ET, the National Weather Service Storm Prediction Center issued tornado watch number 560, which included all of Allen County. An indication of the rarity of December tornadoes in Allen County is that a list of tornado warnings since 1986 includes none that covered any part of our county.

Local storm spotters were nonetheless prepared, despite the unusual time of year and late hour of the watch.

Jay Farlow, W9LW, activated the Skywarn net in standby mode at 12:33 a.m. ET on the ACARTS 146.88 MHz repeater. Standby mode allows normal repeater use, while encouraging users to keep transmissions short and allow longer-than-normal breaks between transmissions. This facilitates breaking into conversations with important weather information.

Fortunately, no severe weather created a need for spotter reports or warnings that affected Allen County. A 1:15 a.m., the NWS Northern Indiana office issued a special weather statement that indicated strong thunderstorms with winds in excess of 40 mph were possible.

By 2:15 a.m. ET, that line of rain had passed to the east of Allen County and radar showed nothing behind it, so W9LW discontinued net operations.

The following stations made their presence known during the operation and were ready to report severe weather, if necessary:

KD9NIV, John, Fort Wayne  
N9QCL, Roger, Columbia City  
KD9NYZ, Jim, Fort Wayne  
KD9QHI, Jerry, Fort Wayne  
K9SKS, Steve, Fort Wayne  
K3DCK, Dennis, Fort Wayne  
W8FY, Rick, Van Wert

# Hamsplatter

Fort Wayne Radio Club

P.O. Box 15127, Fort Wayne, IN

## From the FWRC President: Carole's Corner



Happy New Year! Let us all hope that 2022 is much better than the past two years. 2021 was passable, but we are looking for better results in 2022! I hope everyone had a wonderful Holiday with family and friends. Ours was quiet, but filled with family.

This month our meeting is Friday, January 21, 2022, 7:00pm at the Good Shepherd United Methodist Church. Instead of a speaker this month, we are going to have an open mike night. The idea is to have everyone comment on when and how they got into the hobby, what aspects of it they like best, and so forth. We may learn some new things about each other... good things. Our meeting will not take place in Rauch Hall, but in a large classroom, as we have done sometimes in the past.

In the meantime, stay warm, healthy and have a safe New Year.

73 & 88,

*Carole,*

*WB9RUS*

## Next FWRC Meeting

Friday, January 21, 2022  
Good Shepherd United Methodist Church  
4700 Vance Ave, Fort Wayne, IN 46815

### FWRC Officers 2022

#### President

Carole Burke, WB9RUS  
(260) 637-1989  
Wb9rus(at)comcast.net

#### Vice President

Paul Prestia, KA3OPZ  
(260) 485-9632  
Phixer(at)gmail.com

#### Secretary

Al Burke, WB9SSE  
(260) 637-1989  
Aburke55(at)comcast.net

#### Treasurer

Bob Streeter, W8ST

#### Communications Manager

Charles Ward, KC9MUT  
(260) 749-4824  
Kc9mut(at)yahoo.com

#### Directors

Steve Nardin, W9SAN  
(260) 482-4039  
W9san(at)arrl.net

Clarke Derbyshire, KG9FM  
(260) 485-6255  
Cderbyshire(at)  
comcast.net

Terry Bowman, K9FMX

Larry Temenoff, KB9OS

#### Newsletter Editor

Josh Long, W9HT

# Allen County Amateur Radio Technical Society

# State of the Arts

Allen County Amateur Radio Technical Society

P.O. Box 10342, Fort Wayne, IN

## FROM THE

## ACARTS PRESIDENT

JANUARY 2022

Happy New Year everyone!

First off, I would like to give many thanks to Dave (W9LKH) for all the years as president for the ACARTS. I know I have some big shoes to fill and can keep the club as active or more in the community.

Our last board meeting on December 14, there was an array of topics discussed. The main topic, HamFest 2022. As it is now, HamFest 2022 is a go!! Of course, we will be brainstorming for the next several months on how we can get more vendors and activities for HamFest 2022.

I would like to thank everyone that joined us for our annual Christmas Dinner at the Liberty Diner. The food was great, the service top notch, and lots of great conversations.

As of right now, the Salvation Army are the only ones that responded to letting us use their facilities for board meetings and general meetings. As I am typing (12/28/2021) I have not received conformation information from the Salvation Army but expect too soon. I sure that the delay is due to the holidays and seeing how the COVID-19 Omicron variant plays out. I will email all our members when I have everything set in stone.

Over the next few months, I hope to bring more news to our community as we plan for 2022. Feel free to email me with any questions or topics to cover during general meetings.

Thank you all!

73,

*Chris McCullough, W9TSB*

### ACARTS Officers 2022

#### President

Chris McCullough W9TSB  
260-312-2750  
kd9lrw(at)gmail.com

#### Vice President

Jim Boyer KB9IH  
260-489-6700  
kb9ih(at)arrl.net

#### Secretary (open)

#### Treasurer

Howard Pletcher N9ADS  
260-747-5252  
n9ads(at)arrl.net

#### Station Manager

Jim Sampiere KD9NPL  
260-999-8132  
Kd9npl(at)gmail.com

#### Fundraising Manager

Fred Gengnagel KC9EZA  
260-704-7801  
kc9ezp(at)gmail.com

#### Directors at Large

Bob Erb N9PWM  
260-466-7772  
roberterb(at)hotmail.com

Steve Shannon K9SKS  
260-704-5353  
k9sks(at)aol.com

Dan Dahms N9NWH  
260-503-4163  
n9nwh(at)arrl.net

#### W9INX Trustee

Dave Lindquist W9LKH  
260-485-6135  
w9lkh(at)comcast.net

# ACARTS

## ACARTS December 2021 Board Meeting Minutes

The meeting was called to order by Dave, W9LKH.

Dave announced that the Christmas dinner would be at 6:00 p.m. on Tuesday December 21st at the Liberty Diner. He added that he had about 15 reservations so far and asked if there were any board members present that would like to sign up.

Dave asked Chris, W9TSB, the incoming president, if he was successful in contacting the Red Cross and the Salvation Army about using their facilities for meetings next year. He stated that he had reached out to both agencies and that things were in the works.

Dave asked Fred, KC9EZP, if he had anything to report on the Hamfest. Fred stated that he is in the process of signing the contract with the Coliseum for the 2022 Hamfest.

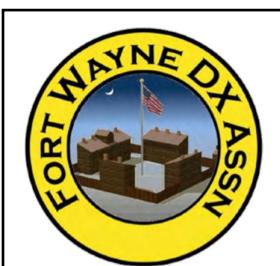
It was decided that a \$300.00 donation would be made to the Salvation Army as we had used their facilities for the past six months. No other donations would be made as the club lost money on the Hamfest.

The meeting was adjourned at 8:15 p.m.

*Submitted by Dave Lindquist, W9LKH*

## Auroral-E Opening on 10 Meters to Scandinavia

By Carl Luetzelschwab K9LA



On Sunday afternoon December 19, I checked PacketCluster spots to see what

was going on with the bands – especially the higher bands (15 meters, 12 meters and 10 meters). The sunspot number had spiked up significantly in the past several days, meaning there was lots of EUV (extreme ultraviolet) radiation to increase ionization in the F2 region of our ionosphere and raise the MUF (maximum useable frequency). What caught my eye was a spot for OHØZ (Aland Island) on 10 meter CW.

I turned on the radio, turned on the amplifier and made sure the directional antenna was pointed to the northeast. The OHØZ station was on the spotted frequency, and he had a pronounced auroral buzz to his signal. It didn't take long to get him in the log

at 1847 UTC.

After working OHØZ, I heard and worked other stations on 10 meter CW. See the accompanying list of stations worked. All but one (OX3XR in Greenland) were Scandinavian stations (Norway, Sweden and Finland), and all the Scandinavian stations had an auroral buzz – the OX station didn't to any large degree. I did not hear any European stations farther south.

What was the mechanism for these QSOs? It's commonly called auroral-E propagation, which requires enough electrons precipitating into the auroral oval (the ring around the polar cap) due to an elevated K index to support the higher frequencies. It also requires the path to be tangential to the auroral oval. Figure 1 shows the scenario for my QSOs on December 19 at 1900 UTC with a K index of 4. The overhead sun (the yellow dot) is off the west coast of South America.

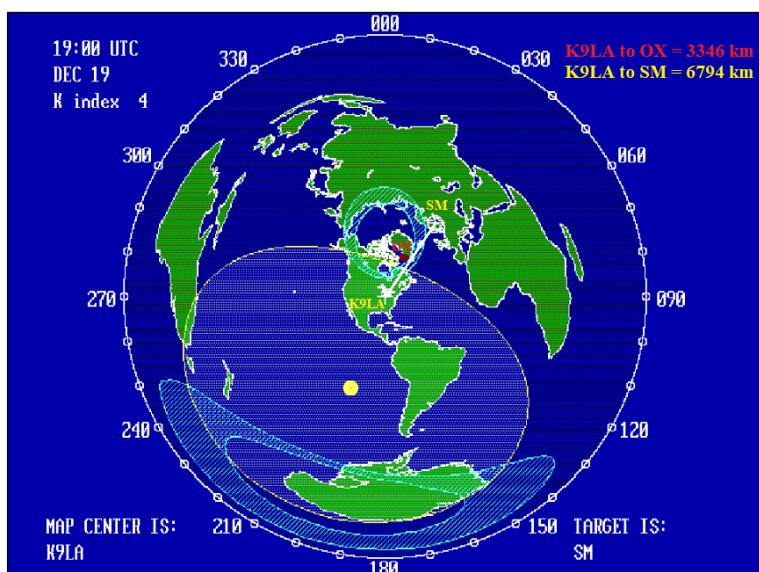
The center of the map is K9LA, and great circle paths are straight lines. The outer perimeter of the map is 20,000 km, which is halfway around the world. The white line is the great circle path from K9LA to SM

(both annotated in yellow), and is 6794 km long. Also included is OX3XR (annotated in red), which is 3346 km from K9LA. Note that the path to SM (and to nearby OH) was indeed tangential to the auroral oval.

Let's first look at the path to OX3XR. At 3346 km, that could be accomplished with one F2 hop. The fact that OX3XR had little auroral buzz suggests auroral-E had nothing to do with this QSO. And looking at F2 MUF data along this path on December 19 at 1900 UTC shows that a 3346 km F2 hop could have been supported – thanks to the increased sunspot numbers.

For the Scandinavian QSOs, my best guess is an initial F2 hop got my signal close enough to the auroral oval to enable two auroral-E hops to SM and OH. I say two hops as the distance from OX3XR (where my signal might have come down from an F2 hop) to SM is 3448 km – that's too long for a single auroral-E hop. As for a lack of any farther south European stations, that can be explained by the fact that Europe was in darkness at and after 1900 UTC – thus the F2 MUF would be below 10 meters and that path was not tangential to the auroral oval.

Finally, from the aforementioned list of stations worked, note that I didn't hear anything on 12 meters, but I did hear (and work) LA6YEA on 15 meters. I bet not many caught this opening, nor even know about auroral-E propagation. Many of us in the Midwest have worked this path previously on 15 meters and 10 meters in DX contests.



UTC	call	freq in MHz
1847	OHØZ	28
1856	SM2EKM	28
1857	OX3XR	28
1901	SM2LIY	28
1902	SM6BGA	28
1909	SM3EVR	28
1949	SM6MCW	28
2043	LA6YEA	21

# Tuning Up

## Radio in Popular Literature: The Dawn of Radio

Happy 2022 everyone! I hope you all have a very blessed and healthy new year. To start off this new year, I thought it would be interesting to look at some of the popular book series that referenced or even focused on amateur radio 100 years ago this year (plus or minus a few years).

### Book Series from the Early 1900s

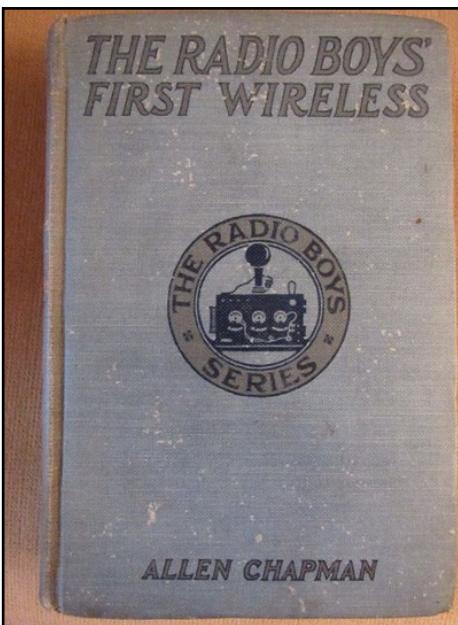
As most hams know, amateur radio had its roots in the experiments by such scientists as Guglielmo Marconi in the late 1800s. Such experiments yielded a variety of technology, such as the “wireless” (as the radio was known at the time). From about 1900 onward, amateur radio, at least as a hobby, began to increase in popularity. This increase in popularity was mirrored by magazines devoted to electronics, such as the *Electrical Experimenter* and *QST*, as well as book series such as *Tom Swift* and *The Radio Boys*. These two book series are the subject of this month’s article.

### Background to *Tom Swift* and the *Radio Boys* book series

The book series *Tom Swift* was

originally published between 1910 and 1941, with some 40 books published as part of the series. The *Tom Swift* series heavily emphasized science or mechanics topics, like airships, electric cars, motor boats, and of course, radio (although radio only features significantly in one book).

The *Radio Boys* series was published from about 1922 to 1930. These books were published simultaneously to the growing interest in broadcast radio, and the series’ focus was, true to its title, radio. The main characters of the book are not strictly amateur radio operators, but they do share many of the same interests and skills of the early radio amateurs, such as building their own receiving sets and learning to send code (CW).



### Observations

There are a couple of observations that I think jump out from these separate book series. The first point which I think is rather intriguing is the fact that the year the book *Tom Swift and*

*His Wireless Message* was printed only one year before the sinking of the *Titanic*. This means that the book was published before radio amateurs were required to be licensed to legally operate, and it also means that at the time, radio amateurs were not required to operate on wavelengths of 200 meters and shorter. The date of the book also helps explain why the “wireless” set built by Tom Swift was a spark-gap transmitter. At that time, spark-gap transmitters were the norm, and although they were rather inefficient, the idea of using such a transmitter was considered normal for that time and age.

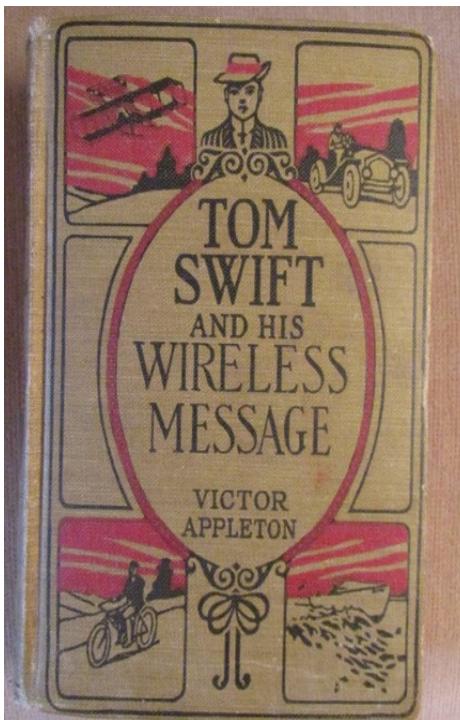
A second interesting point is the antenna used by Tom Swift. Here is an excerpt from the book describing the antenna: “Under the direction of the young inventor, they began to string the wires from the top of the dead tree, to a smaller one, some distance away, using five wires, set parallel, and attached to a wooden spreader, or stay. The wires were then run to the dynamo, and the receiving coil, and the necessary ground wires were installed.” From the preceding paragraph, it is fairly obvious that Tom Swift was building a cage-style Marconi antenna, with some unspecified number of radials. That style of antenna was particularly popular at that time, as can be seen by photographs of the early amateur radio stations. Ten years later, during the Transatlantic Tests, a cage-style antenna was used by the most successful of

transmitting stations, 1BCG.

The next interesting point actually comes from the Radio Boys book. The book *The Radio Boys' First Wireless* is actually the first book in the series, and as such, the entire book's topic is how the Radio Boys first became introduced to radio. In the book, antennas are referred to as "aerials", a practice common in the early days of wireless. In fact, to this day, our UK friends across the pond continue to use the term "aerial". Why or how we American hams came to call "aerials" antennas is beyond your author's knowledge, but finding the term "aerial" in use in 1922 is indicative as to how long the word was in routine use by American amateurs.

The book goes on to describe how one can make an "aerial". This antenna sounds like a Marconi-style antenna, with either a sloping end-fed or possibly an inverted L configuration. Here is a description of the antenna used and created by the Radio Boys: "You want about a hundred or a hundred and twenty feet of that [copper wire]. You can extend it horizontally for about fifty feet, say, for instance, from the side or back of your house to the barn or the garage, and then have it go up as high as it can go. The upper end doesn't have to be in the outer air, for the sound will come along it if it's in the attic. Still it's better to have it outside if possible." The boys are told to attach a "ground" to the antenna, either

via a water pipe or some pipe that runs into the ground. Notice the length mentioned – 100 to 120 feet. 120 feet is almost a perfect quarter-wave for the 160m band. Is this just a coincidental length? It's possible. Discussions of crystal radios online mention antenna lengths anywhere from roughly 30 feet to 100 feet in length. Your author's theory is that at this point in time, the rule of thumb for a successful receiving set was that the aerial should be ~100 feet in length, hence the recommended length given in the book.



There's no true description as to what type of receiver the radio boys are using. All that is mentioned is that the receiver requires a large coil (made out of multiple turns of copper wire wrapped around some form), and that they needed to build a "condenser" (then a term used for a capacitor). Additionally, the

boys must build a "sliding contact" that will slide along the coil, helping to tune the radio. All of these parts suggest that the boys are building a crystal radio, which would make sense, since the book's intended target audience was boys who probably would not have a lot of spending cash.

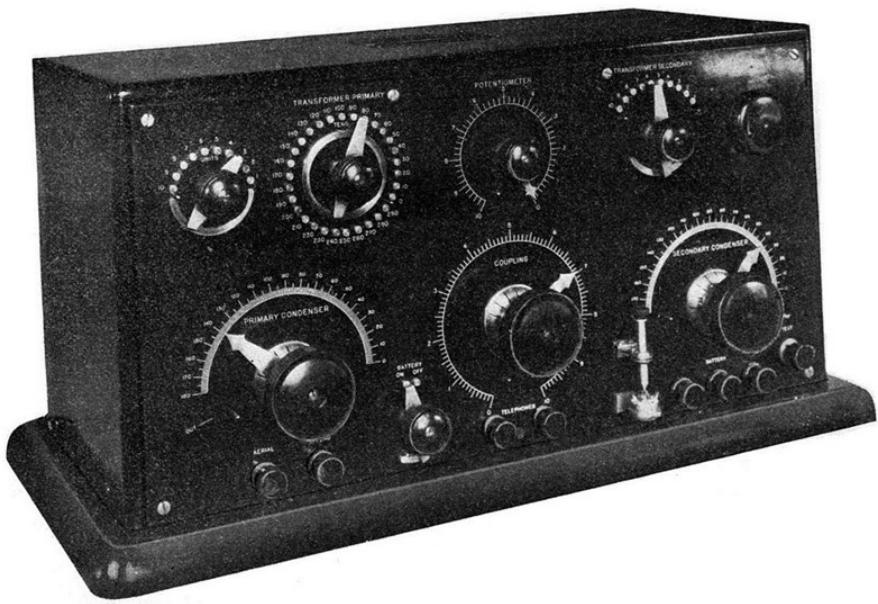
Altogether, these two particular books from two different series help give a glimpse into the exciting, burgeoning "wireless" world and amateur radio hobby. At the time these books were published, "wireless" was at the frontier of science, and the youth of the day were actively being encouraged to pursue experimentation in that science. It's amazing how far the science has come, and I'm sure many of the engineers, physicists, and scientists of today were inspired by the radio pioneers of the early 1900s.

If you would like to read these books yourself, the book *Tom Swift and His Wireless Message* is available at the Allen County Public Library as an ebook. You can read *The Radio Boys' First Wireless* on the website of Project Gutenberg at the following web address: <https://www.gutenberg.org/ebooks/7899>.

73 de Jim AC9EZ

## Announcing the FWRC 2022 Crystal Radio Contest!

The 2022 Crystal Radio Contest will be held starting in the month of February. Keep an eye out for more information in the February edition of the Allen County HamNews!



# THE FOXHUNT CHRONICLES WILL RETURN...

---

Stay tuned to upcoming editions of the Allen County HamNews for more information and 2022 foxhunt dates.

## January = SKCC K3Y de N8KR

Each year the Straight Key Century Club celebrates its anniversary with a month long event with special event stations located in each of the US and Canadian call districts along with DX entities. Members can request the use of **K3Y/\*** depending on their location. Last year 8 FWRC members operated as **K3Y/9** and made over 1,000 of the 41,000+ K3Y qso's during January. Leading the pack was John – NJ0U with 253 with Joe – WB9EAO following with 197. Other ops included Don – K9LI, Josh – W9HT, Jim – AC9EZ, Ed – WA9BBN, Jim – KD9GDY, and Ken – N8KR/4/7. The sign-up for this year's event has already begun and Josh – W9HT, Jay – W9LW, John – NJ0U, and Marty – N9SE are already on the schedule. (N8KR is on the schedule for K3Y/4 FL). This is a great opportunity to get on the air and contact the many K3Y stations that will be calling, "CQ." The official start of the month long event is 0000utc January 2. (SKCC does not want to conflict with the annual ARRL Straight Key Night.) If you're not an SKCC member, simply give an honest signal report, your state (IN) and name. There is a wealth of info about K3Y on the SKCC webpage left column under, "**Activities.**"

Here's initial dates and times of our own FWRC SKCC members as they activate K3Y/9. Look for them and give 'em a contact!

2 January 0000-0200utc: Josh-W9HT as K3Y/9 and Ken-N8KR as K3Y/4

2 January 1500-1700utc: Ken – N8KR as K3Y/4

2 January 2100-2300utc: Marty – N9SE as K3Y/9

3 January 0000-0200utc:  
Jay – W9LW as K3Y/9

3 and 5 January 1300-1400utc: John – NJ0U as K3Y/9

**SKCC Weekend Sprint-athon K3Y/9 Multi-op Event at N8KR's shack on Saturday, January 8 from 8am – 6pm. ALL INVITED!!!! There will be two (maybe 3) sta-**

tions in operation as K3Y/9 at Ken's qth. This is a yearly event, although Covid shut us down last year, for the past 6 years. No need to sign up... just come on over. There will be some snacks and coffee and pop and water along with lots of visiting and plenty of opportunity to activate the station or simply listen in and help log! Come any time and stay as long as you like. We're not going to set any records but simply have a good time together and make a bunch of contacts. The nice thing about this is that you can operate as K3Y/9 at Ken's, and go home and operate WES with your own call. And if you have questions about logging, software, operating, format, etc., there will be many around to help answer questions. If you have questions or need more information, contact [n8kr@arrl.net](mailto:n8kr@arrl.net). There is also a YouTube video of K3Y/9 at N8KR's done by Kevin, KB9RLW.

"Official" congratulations to the following FWRC SKCC members:

Bruce – N9DGL who just finished Tx6 on his way to Senator Award

Steve – AC9XS who received his Senator award on November 24

John – NJ0U who received his Senator award on December 14

Welcome to future FWRC member and active SKCC member, Marty – N9SE. Marty is in the process of moving up to the Fort Wayne area from Indianapolis after taking a new job up here.

*73 de N8KR*

**K3Y  
SPECIAL  
EVENT  
STATION**



## **Selected Contests and Operating Events** **January 2022**

Date	Event	Dates/Times
1	Straight Key Night	is held every January 1 from 0000 UTC through 2359 UTC.
22-23	North American QSO Party, SSB	1800Z, Jan 22 to 0559Z, Jan 23
8-9	SKCC Weekend Sprintathon	1200Z, Jan 8 to 2400Z, Jan 9
26	SKCC Sprint	0000Z-0200Z, Jan 26
15-16	North American QSO Party, CW	1800Z, Jan 15 to 0559Z, Jan 16
28-30	CQ 160-Meter Contest, CW	2200Z, Jan 28 to 2200Z, Jan 30
15-17	ARRL January VHF Contest	1900Z, Jan 15 to 0359Z, Jan 17
2-31	K3Y Special Event Station	

**RadioReport**

# For Sale



## For Sale: Yaesu Dual-Band Handheld with Many Accessories

Included:

- Yaesu FT-60 dual-band, handheld, FM transceiver with stock antenna in good condition. Radio is already programmed for all Fort Wayne-area repeaters.
- Yaesu FNB-83 NiMH battery pack
- After-market (Elxjar) NiMH battery pack
- After-market (brand unknown) alkaline (AA) battery case
- Batteries America EMS-57-83 desk charger
- Yaesu NC-88B wall charger
- Batteries America E-DC-5BA mobile adapter (power and charge)
- Pryme Trooper SPM-2102 heavy-duty speaker microphone with large PTT button (easy to activate while wearing gloves)
- MFJ-295 speaker microphone
- JDI JD-170X earphone microphone
- After-market (brand unknown) earphone with ear loop, boom mic and PTT switch
- Nagoya NA-772 extended, 2 dB gain, dual-band antenna
- After-market vinyl case (to protect keypad labels)
- Valley Enterprises RPC-Y1-UF FDTI USB programming cable for KC8UNJ FT-60 Commander or CHIRP software.

Offered as complete package for \$225. This radio and accessories have served me well for several years, but I replaced it with a combination FM/DMR handheld and no longer need the Yaesu. Contact Jay Farlow, W9LW, arsw9lw(at)gmail.com.

Area Nets							
Daily			Tuesday				
8:00 AM	3.535	Daily (QIN) Indiana Section CW net	7:30 PM	147.150+	21 Repeater Group Net (97.4 PL)		
8:30 AM	3.940	Daily Indiana Traffic Net	8:00 PM	50.580 USB	FWRC 6-Meter SSB Net		
6:00 PM	3.940	Daily Indiana Traffic Net	9:00 PM	146.940-	Allen Co. ARES Training Net (141.3 PL)		
6:30 PM	146.880-	IMO (alternate is 146.760)	Wednesday				
7:00 PM	147.015+	Tri State Two Meter Net	7:00 PM	146.760-	FWRC YL Net		
8:00 PM	3.535	Daily (QIN) Indiana Section CW net	8:00 PM	145.270-	Whitley Co. ARES (141.3 PL)		
Week-days			8:00 PM	50.580 FM	FWRC 6-Meter FM Net		
9:00 AM	3.820	Little Red Barn Net	9:00 PM	146.940-	Help and Swap Net (141.3 PL)		
Sunday			Thursday				
8:00 PM	444.550+	Whitley Co. ARC Sunday Night Net (141.3 PL)	8:00 PM	D-STAR	Indiana D-STAR net (Note 3)		
8:30 PM	1.965 & 146.910-	"No-Name" Net also on EchoLink Node number 519521	8:00 PM	50.580	AM 6-Meter AM Net		
9:00 PM	145.53 simplex	Northeast Indiana Packet Net 1200 baud (Note 2)	8:30 PM	145.510 simplex	Allen County ARES Digital Operations Team Training Net (Note 4)		
Monday			Saturday				
8:00 PM	224.780-	Fort Wayne 224 Net	8:00 PM	146.685-	Huntington ARES(141.3 PL)		
1. All times local time. Any changes or corrections should be submitted to the newsletter editor at drjoshlong (at) gmail.com. 2. NEIPN is direct accessible via any BPQ Chat Node (or through Node hopping etc.) via other packet frequencies in this area and other areas through other nodes (it is locally direct accessible on 145.53 in NC & NE Indiana/NW Ohio and SE Michigan using KA9LCF-11, KC9VYU-11, N9LCF-11, N9P XO-11, K9BIF-11) Most BPQ Nodes use an SSID of -11. 3. Reflector REF024B. 4. Net starts using BPSK-31 and switches to BPSK-250 after roll call to pass traffic etc. NBEMS suite of software (FLDIGI, FLMSG, and FLAMP) is preferred. 5. Indiana HF Traffic Nets Web Site: <a href="http://www.inarrl.org/index.php/public-service/indiana-nts">http://www.inarrl.org/index.php/public-service/indiana-nts</a>							

Fort Wayne area repeaters (updated as of 1/1/22)							
Frequency	Offset	Tone/Notes	Callsign	Frequency	Offset	Tone/Notes	Callsign
145.330	-0.6 MHz	--	W9FEZ	443.100	+5 MHz	DMR	K9MMQ
146.880	-0.6 MHz	--	W9INX	443.275	+5 MHz	P25	K9MMQ
147.255	+0.6 MHz	--	W9INX	442.6375	+5 MHz	--	N9MTF
146.760	-0.6 MHz	141.3	W9TE	444.800	+5 MHz	--	W9FEZ
146.910	-0.6 MHz	--	W9TE	442.99375	+5 MHz	D-Star	W9TE
146.940	-0.6 MHz	141.3 FM C4FM	W9TE	444.250	+5 MHz	141.3	W9AVW
224.780	-1.6 MHz	--	W9FEZ	444.8750	+5 MHz	141.3	W9TE
				53.3300	-1 MHz	--	W9FEZ

**FWRC Membership Application**

Name: \_\_\_\_\_ Call Sign: \_\_\_\_\_  
License Class: \_\_\_\_\_  
Street address: \_\_\_\_\_ City: \_\_\_\_\_  
State: \_\_\_\_\_ ZIP: \_\_\_\_\_ Phone #:(\_\_\_\_\_) \_\_\_\_\_  
Email address: \_\_\_\_\_ ARRL Member? \_\_\_\_\_  
(ARRL membership helps the club maintain ARRL affiliation)  
May we list your name, call & email address in our membership roster & on our club web site?

**Fort Wayne Radio Club dues:**

Regular membership	\$25.00 / year
Family membership <sup>1</sup>	\$35.00 / year
Student membership <sup>2</sup>	\$5.00 / year
Associate membership <sup>3</sup>	\$20.00 / year

(Memberships for July-December are ½ the stated amounts)

Please attach a check to this form (paying by check is strongly encouraged) made out to:

Fort Wayne Radio Club (check number \_\_\_\_\_) and bring to a club meeting or mail to:  
Fort Wayne Radio Club  
P.O. Box 15127  
Fort Wayne, IN 46885-5127

Please list all names and calls on an attached sheet.

K-12 or full time student.

Unlicensed member.

**ACARTS Membership Application**

Name: \_\_\_\_\_ Call Sign: \_\_\_\_\_  
License Class: \_\_\_\_\_  
Street address: \_\_\_\_\_ City: \_\_\_\_\_  
State: \_\_\_\_\_ ZIP: \_\_\_\_\_ Phone #:(\_\_\_\_\_) \_\_\_\_\_  
Email address: \_\_\_\_\_ ARRL Member? \_\_\_\_\_  
(ARRL membership helps the club maintain ARRL affiliation)  
May we list your name, call & email address in our membership roster & on our club web site?

**ACARTS dues:**

Regular membership	\$12.00 / year
Additional family members <sup>1</sup>	\$6.00 / year
Student membership <sup>2</sup>	\$6.00 / year
Associate membership <sup>3</sup>	\$6.00 / year

(New regular memberships are \$1.00/month)

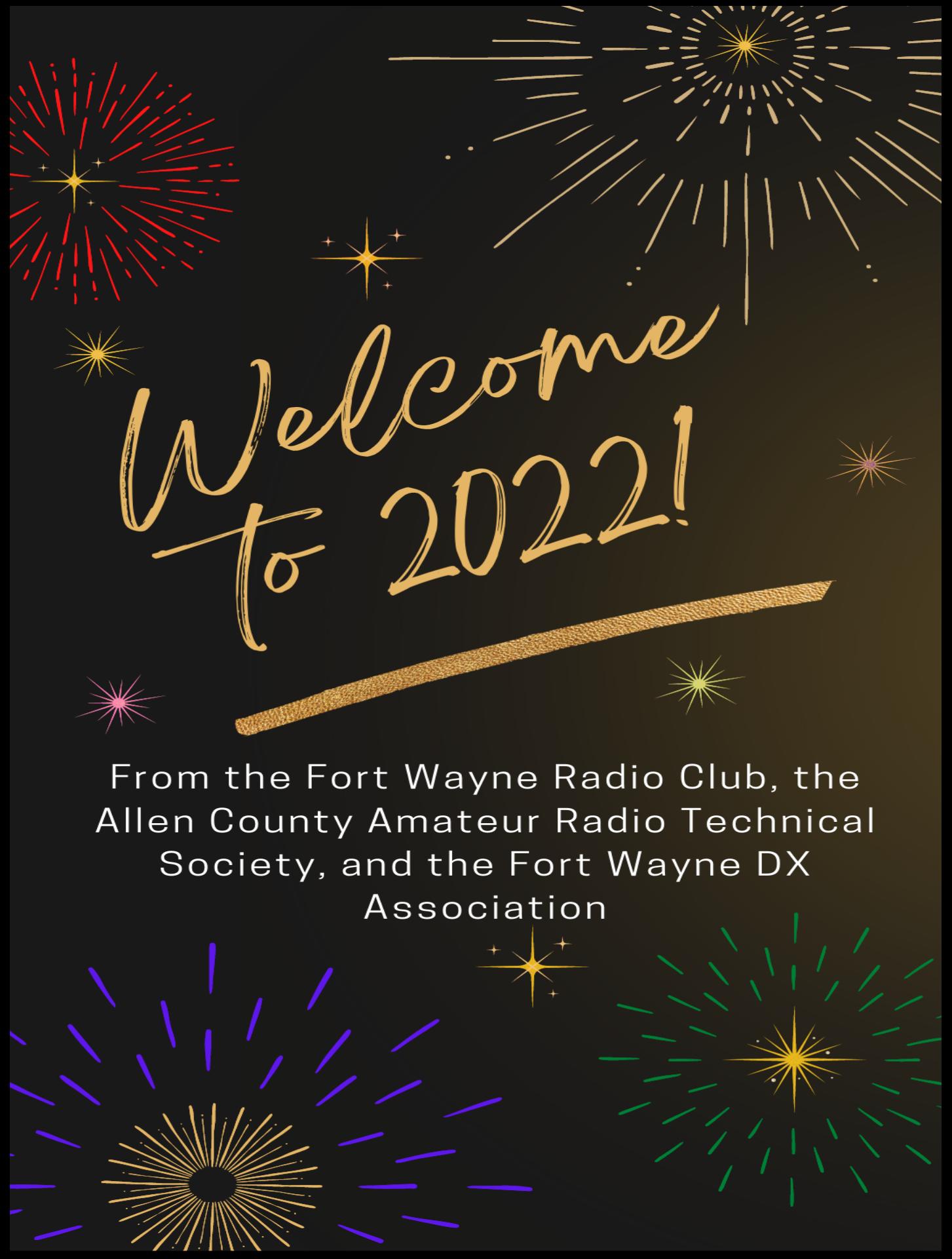
Please attach a check to this form (paying by check is strongly encouraged) made out to:

Allen County Amateur Radio Technical Society (check number \_\_\_\_\_) and bring to a club meeting or mail to:  
A.C.A.R.T.S.  
P.O. Box 10342  
Fort Wayne, IN

Please list all names and calls on an attached sheet.

K-12 or full time student.

Unlicensed member.



Welcome  
To 2022!

From the Fort Wayne Radio Club, the  
Allen County Amateur Radio Technical  
Society, and the Fort Wayne DX  
Association